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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,209	07/07/2003	Nobutaka Minefuji	P23558	4589
7055	7590	09/21/2004	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			RAIZEN, DEBORAH A	
			ART UNIT	PAPER NUMBER
			2873	

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/613,209	Applicant(s) MINEFUJI, NOBUTAKA	
	Examiner Deborah A. Raizen	Art Unit 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1003</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Mizuguchi (2003/0072085).

3. In regard to claim 1, Mizuguchi discloses a zoom lens system (Fig. 1, Example 1) comprising a negative first lens group (G1), a positive second lens group (G2), and a positive third lens group (G3), in this order from an object, wherein said negative first lens group comprises a negative meniscus lens element (L11) having the convex surface facing toward said object (Fig. 1), and said positive third lens group comprises a positive biconvex lens element (L31); wherein upon zooming from the short focal length extremity to the long focal length extremity, at least said negative first lens group and said positive second lens group are moved (arrows in Fig. 1); wherein a diaphragm (SP) is provided on the object side of said positive second lens group (Fig. 1), and moves integrally therewith (Fig. 1 and Table 1); and wherein said zoom lens system satisfies the following conditions:

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$0.25 < R1/D1 < 0.55$ (0.546; from Table 1, $R1=r2=7.3466$ and $D1=d6$ at Wide angle=13.451; or, if the diaphragm is not considered the first surface of the second lens group, $D1$ is 13.851, giving a ratio of 0.53)

$0.25 < f2/TL < 0.45$ (0.32; $f2$ and TL are calculated from the lens parameters disclosed in Table 1 to be 11.04 mm and 34.53 mm, respectively; TL is defined differently in Mizuguchi, so that the disclosed value of 38.84 is not used)

wherein $R1$ designates the radius of curvature of the image-side surface of said negative meniscus lens element, which constitutes said negative first lens group; $D1$ designates the distance between said negative first lens group and said positive second lens group at the short focal length extremity; $f2$ designates the focal length of said positive second lens group; and TL designates the distance along the optical axis from the most object-side surface of said negative first lens group to the most image-side surface of said positive third lens group, at the short focal length extremity.

In regard to claim 2, in the Mizuguchi zoom lens system, the positive second lens group comprises a positive lens element ($L21$) having a convex surface facing toward said object (Fig. 1), and cemented lens elements having a positive lens element ($L22$) and a negative lens element ($L23$), in this order from said object, wherein the most image-side surface of said positive second lens group comprises a divergent surface (Fig. 1; surface 12 in Table 1); and wherein the zoom lens system satisfies the following condition:

$0.5 < R2/fw < 1.0$ (0.65; from Table 1, $R2=r12=3.8988$ and $fw=5.97$)

wherein f_w designates the focal length of the entire the zoom lens system at the short focal length extremity; and R_2 designates the radius of curvature of the most image-side surface of said positive second lens group.

4. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Goosey, Jr. (6,377,404).

In regard to claim 1, Goosey discloses a zoom lens system (Figs. 1-3) comprising a negative first lens group (12), a positive second lens group (consisting of lens element 104), and a positive third lens group (consisting of lens element 105), in this order from an object, wherein said negative first lens group comprises a negative meniscus lens element (101) having the convex surface facing toward said object (101(a)), and said positive third lens group comprises a positive biconvex lens element (105); wherein upon zooming from the short focal length extremity to the long focal length extremity, at least said negative first lens group and said positive second lens group are moved (col. 3, lines 50-51); wherein a diaphragm (16) is provided on the object side of said positive second lens group (Fig. 1), and moves integrally therewith (col. 4, lines 37-38, and Table 1A); and wherein said zoom lens system satisfies the following conditions:

$0.25 < R_1/D_1 < 0.55$ (0.37; from Table 1A, R_1 =radius of 101b=6.509 and from Table 1B, $D_1=A$ at Zoom Position #1=17.744; or, if the diaphragm is not considered the first surface of the second lens group, D_1 is 18.444, giving a ratio of 0.35)

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$0.25 < f2/TL < 0.45$ (0.36; $f2$ and TL are calculated from the lens parameters disclosed in Tables 1A and 1D to be 12.0 mm and 33.1 mm, respectively; $f2$ is the focal length of lens element 104 only)

wherein $R1$ designates the radius of curvature of the image-side surface of said negative meniscus lens element, which constitutes said negative first lens group; $D1$ designates the distance between said negative first lens group and said positive second lens group at the short focal length extremity; $f2$ designates the focal length of said positive second lens group; and TL designates the distance along the optical axis from the most object-side surface of said negative first lens group to the most image-side surface of said positive third lens group, at the short focal length extremity.

In regard to claim 3, in the Goosey zoom lens, upon zooming from the short focal length extremity to the long focal length extremity, said negative first lens group monotonously moves toward an image (col. 3, lines 50-55; also, the zoom spacing data in Table 1B, which gives the values of variable distances A and B , shows that the first lens group moves toward the image) said positive second lens group monotonously moves toward said object (col. 3, lines 50-55, and Figs. 1-3), and said positive third lens group integrally moves with said positive second lens group (lens element 105 moves integrally with lens element 104 because they are both in what the reference labels lens group 14); and wherein said zoom lens system satisfies the following conditions:

$2.2 < |f1/fw| < 3.0$ (2.93; $f1$ is calculated from the parameters in Tables 1A and 1D to be -18.74 mm and fw is disclosed to be 6.39 mm in Table 1B as EFL at Zoom Position #1)

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$1.0 < f_3/f_w < 1.9$ (1.6; f_3 is calculated from the parameters of lens element 105 in Table 1A to be 10.17 mm)

wherein f_1 designates the focal length of said negative first lens group; f_3 designates the focal length of said positive third lens group; and f_w designates the focal length of the entire the zoom lens system at the short focal length extremity.

Allowable Subject Matter

5. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of claim 4, in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper.

The prior art fails to teach a combination of all the features in claim 4. For example, these features include the detailed structure and conditions recited in claim 1 and also the limitations that the first lens group monotonously moves toward said image, the second lens group monotonously moves toward the object, the third lens group is immovable with respect to the image plane, and the zoom lens system satisfies the conditions regarding the ratios of the focal lengths of the first and third lens groups to f_w , in combination with all the other limitations of the claim.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah A. Raizen, Ph.D., J.D., whose telephone number is (571) 272-2336. The examiner can normally be reached on Monday-Friday, from 10:00 a.m. to 3:00 p.m. Eastern Standard Time (a part-time schedule).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached at (571) 272-2328. The USPTO central official fax number is (703) 872-9306 (please note that this number is different from the previous two numbers provided until the summer of 2003).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or at 703-305-3028 or at 703-308-6845 between the hours of 6 a.m. and midnight Monday through Friday EST, or by e-mail at: ebc@uspto.gov. Additional information is available on the Patent EBC Web site at: <http://www.uspto.gov/ebc/index.html>.

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